

ABSTRACT

A mobile station apparatus enabling increases in communication system capacity when uplink high-speed packet communication is performed and the like. The 5 mobile station having a plurality of antennas, antenna 1 and antenna 2, compares the reception power of a signal r_{21} received in antenna 1 with the reception power of a signal r_{22} received in antenna 2 among signals transmitted from base station 2 of an adjacent cell, selects antenna 10 1 as a transmission antenna when "the reception power of $r_{21} <$ the reception power of r_{22} ", while selecting antenna 2 as a transmission antenna when "the reception power of $r_{21} \geq$ the reception power of r_{22} ", transmits an uplink signal to base station 1 from the selected antenna, and 15 reduces interference caused in base station 2 of the adjacent cell.